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Of Attorneys for Plaintiff-Relator

UNDER
SEAL

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF OREGON

**UNITED STATES OF AMERICA EX REL.
MICHAEL RAY PERRY,**

Relator,

v.

**'HOOKER CREEK ASPHALT & PAVING,
LLC; 'TIDEWATER CONTRACTORS, INC.;
'ROY L. HOUCK CONSTRUCTION
COMPANY; 'OREGON MAINLINE PAVING,
LLC; 'WILDISH STANDARD PAVING CO.;
JAMES W. FOWLER CO.; HAMILTON
CONSTRUCTION CO.; CRESTLINE
CONSTRUCTION COMPANY, LLC;
CARTER & COMPANY, INC.; J.C.
COMPTON CONTRACTOR, INC.; JAL
CONSTRUCTION, INC.; DAVID EVANS
AND ASSOCIATES, INC.; M.J. HUGHES**

Case No. **CV '08-6307-HO**
COMPLAINT

**(QUI TAM ACTION PURSUANT TO 31
USC § 3729; RETALIATION IN
VIOLATION OF 31 USC § 3730;
VIOLATION OF FIRST AMENDMENT
RIGHT OF FREE SPEECH PURSUANT
TO 42 USC § 1983;
WHISTLEBLOWING RETALIATION
PURSUANT TO ORS 659A.203)**

[UNDER SEAL]

JURY TRIAL DEMANDED

23317

CONSTRUCTION; HAP TAYLOR & SONS, INC.; ELTING, INC.; HIGH DESERT AGGREGATE & PAVING; KEY CONSTRUCTORS, INC.; FISHER LAND COMPANY, Oregon corporations; STAKER AND PARSON COMPANIES, dba KLAMATH PACIFIC, a Utah Corporation; JON W. HEACOCK; TOM FEELEY; PATRICK CIMMIYOTTI; NORMAN C. HANSEN; RON SNELL; ROB PETERS; DARRELL NEWTON; BRENT PIERSON; DAVID DAVIES; KEN STONEMAN; CATHERINE M. NELSON; JEFFREY GOWER; COLE MULLIS; LUCINDA MOORE; DAVID KIRKLAND; ROBERT BRYANT; JOHN SCOTT, LEE JORDAN, GLEN SCHOESSLER, IAN MACHAN, SIMEON BRUBAKER, RANDI KOBERNIK, STEPHANIE SERPICO and GARY FARNSWORTH, as individuals in their individual capacity,

Defendants.

I. INTRODUCTION

1. This is a *qui tam* action brought by relator Michael Ray Perry ("Perry") for defendant's violations of the United States False Claims Act, 31 U.S.C. § 3729 *et seq.* Relator alleges that defendants presented or caused the presentation of false claims to the United States in connection with certain federal transportation contracts for the construction and maintenance of Interstates, U.S. Routes, and Oregon Routes within the state of Oregon. Defendants misrepresented the quality, compliance, and workmanship of the roads ("surface transportation") in connection with the contracts in question. Portions of the contracted projects at issue were funded through the Federal Aid Highway Program (FAHP), or appropriations and allocation

acts/funds (DOT Appropriations Act 71), administered by the Federal Highway Administration (FHWA).

2. By this False Claims Act action, Relator seeks to recover, on behalf of the United States and himself, civil penalties and damages arising from false claims for payment that defendants knowingly made to the United States for surface transportation projects containing substandard and/or defective components, which have caused and will continue to cause premature failure of the highway structure herein, and which pose significant safety risks to the driving public.

II. JURISDICTION AND VENUE

3. This Court has jurisdiction pursuant to 31 U.S.C. § 3730, 31 U.S.C. § 3731, 42 U.S.C. § 1988, and 28 U.S.C. § 1331, 1343, 2201 and 2202.

4. There has been no “public disclosure,” as that term is used in 31 U.S.C. § 3730(e)(4)(A), of the allegations or transactions upon which this action is based. Relator is an “original source” as that term is used in 31 U.S.C. § 3730(e)(4)(B) of this information set out in this Complaint.

5. Venue is appropriate in this District pursuant to 28 U.S.C. § 1391(b)-(c) and 31 U.S.C. § 3732(a) because defendant has offices in this District, can be found in this District, transact business in this District and because the acts complained of took place in this District.

6. All administrative prerequisites to filing this action have been timely satisfied.

III. THE PARTIES

7. Relator Michael Ray Perry was at all material times a natural person residing in the State of Oregon. Perry was employed by ODOT in Region 4, Bend, Oregon, from 1983 until January 2008, when his employment was terminated by ODOT in violation of 31 U.S.C. § 3730 (h), 42 U.S.C. § 1983, and ORS 659A.203. Since 1996, Perry has held positions integrally involved in ensuring contract compliance throughout Region 4.

8. The Oregon Department of Transportation is an administrative agency and arm of the State of Oregon, responsible for building, repair and maintenance of Oregon's state and federal surface transportation routes. ODOT receives money from the United States Government for the purpose of building, repairing and maintaining Oregon's state and federal surface transportation routes in the form of federal contracts, which ODOT is responsible for overseeing and for compliance with federal and state regulations in the execution of those contracts. ODOT hires local private contractors to perform the work set out in the contracts.

9. Defendant **Hooker Creek Asphalt & Paving, LLC**, is an Oregon limited liability corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

10. Defendant **Tidewater Contractors, Inc.**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

11. Defendant **Roy L. Houck Construction Company**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

12. Defendant **Oregon Mainline Paving, LLC**, is an Oregon limited liability corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

13. Defendant **Wildish Standard Paving Co.**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

14. Defendant **James W. Fowler Co.**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

15. Defendant **Hamilton Construction Co. (Oregon)**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

16. Defendant **Crestline Construction Company, LLC**, is an Oregon limited liability corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

17. Defendant **Carter & Company, Inc.**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

18. Defendant **J.C. Compton Contractor, Inc.**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

19. Defendant **JAL Construction, Inc.**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

20. Defendant **David Evans and Associates, Inc.**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

21. Defendant **M.J. Hughes Construction**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

22. Defendant **Hap Taylor & Sons, Inc.**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

23. Defendant **Staker and Parson Companies, dba Klamath Pacific**, is a Utah corporation, licensed to do business in the state of Oregon, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

24. Defendant **Elting, Inc.**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

25. Defendant **High Desert Aggregate & Paving**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

26. Defendant **Key Constructors, Inc.**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

27. Defendant **Fisher Land Company**, is an Oregon corporation, engaged in the business of road construction, and hired by ODOT to perform work on federal road construction and repair projects.

28. Defendants **Jon W. Heacock, Tom Feeley, Patrick Cimmiyotti, Norman C. Hansen, Ron Snell, Rob Peters, John Scott, Randi Kobernik, Stephanie Serpico and Darrell Newton**, are individuals and citizens of the State of Oregon, who are employed by the State of Oregon, Department of Transportation as Project Managers and Assistant Project Managers. Defendants are responsible for overseeing the administration of roads projects contracts. For purposes of this Complaint, at all material times, defendants were acting in their individual capacities.

29. Defendants **Brent Pierson, David Davies, Lee Jordan, Glen Schoessler, Ian Machan, Simeon Brubaker, and Ken Stoneman** are individuals and citizens of the State of

Oregon, who are contracted by private companies to serve as Consultant Project Managers on ODOT roads projects contracts. For purposes of this Complaint, at all material times, defendants were acting in their individual capacities.

30. Defendants **Catherine M. Nelson (Technical Service Manager), Jeffrey Gower (State Materials Engineer), Cole Mullis (Quality Assurance Engineer), Lucinda Moore (former Quality Assurance Engineer), and David Kirkland (Quality Assurance Coordinator)** were and are individuals and citizens of the State of Oregon, who are employed by the State of Oregon, Department of Transportation and are responsible for assuring that all road materials and construction meets contract specifications. For purposes of this Complaint, at all material times, defendants were acting in their individual capacities.

31. Defendants **Robert Bryant and Gary Farnsworth** are individuals and citizens of the State of Oregon, who are employed by the State of Oregon, Department of Transportation as the Region 4 Manager and Region 4 Area Manager respectively, and are responsible for assuring that all road materials and construction meets contract specifications. For purposes of this Complaint, at all material times, defendants were acting in their individual capacities.

IV. RULE 9(b), FED. R. CIV. P. ALLEGATIONS

32. Much of the factual information necessary to prove the allegations in this Complaint is in the exclusive possession of either ODOT, the contractors, or the United States, however, Relator has provided substantial information to the Oregon Secretary of State's office and to the Federal Bureau of Investigation supporting his allegations of fraud.

33. Relator does not have access to the claims for payment made by defendants to the United States made for completion of the contracts identified herein that were funded, financed, or guaranteed in whole or in part by the United States. Such information is in the exclusive possession or control of defendants and/or the United States.

34. Upon information and belief, defendants have submitted and continue to submit claims for payment by the United States of hundreds of invoices relating to road construction and maintenance contracts at issue in this Complaint.

35. Each allegation herein is made upon information and belief and identifies a fact regarding which Relator has, based upon his personal knowledge and experience working for ODOT for 25 years, a reasoned basis to allege, but lacks complete detail.

V. FACTUAL ALLEGATIONS

36. This case concerns the defective workmanship and non-compliant materials used on surface transportation in the State of Oregon. In order for ODOT to secure federal funds for surface transportation and maintenance, ODOT and its contractors must follow policies, procedures, and guidelines to ensure the quality of materials and construction in all federal-aid highway projects on the National Highway System.

A. Federal Requirements for Quality Assurance

37. Title 23 USC § 637.205 requires each state transportation department to develop a quality assurance program to assure that the materials and workmanship incorporated into each Federal-aid highway construction project on the national highway system is in conformity with the requirements of the approved plans and specifications. The program must meet the criteria

set out in § 637.207 and be approved by the FHWA. Laboratories and sampling and testing personnel must meet the qualifications set out in § 637.209.

38. The State of Oregon maintains Quality Assurance Guidelines known as the Manual of Field Test Procedures (referred to by QA personnel as the Brown Book). The Brown Book mandates that all personnel responsible for performing and reporting on tests required on ODOT projects must be certified. The Brown Book certification requirement applies to project personnel working as technicians for the State, Contractors, or Consultants on such projects.

B. ODOT's Quality Assurance Program

39. To account for and ensure compliance with the regulations, in or about 1997 ODOT implemented a Quality Assurance ("QA") program under the FHWA guidelines for QA programs for construction projects on the National Highway System. The program defines the responsibilities of the contractors and ODOT with respect to the needs of the program.

40. The success of ODOT's QA program is dependent on three primary features: Laboratory Certification; Technician Certification; and specific product QC/QA testing plan. It is the latter two features that are at issue in these proceedings.

41. ODOT's QA program consists of three separate and distinct sub-programs: Quality Control, in relation to contractor/vendor operational techniques and activities that are performed or conducted to fulfill contract requirements; Verification, whereby ODOT regional QA performs sampling and testing to validate the quality of the product; and Independent Assurance, consisting of activities that are an unbiased and independent evaluation of all the sampling and testing procedures used in the acceptance program.

42. The roles and responsibilities of the QA program fall on four separate entities:
- a. **Contractors** are responsible for furnishing a written quality control plan; furnishing and using materials/products of the specified quality; providing ODOT approved technicians and laboratories; performing quality control of all materials/products used on ODOT construction projects; sampling and testing materials using the appropriate devices and procedures; performing all required testing and providing the results to ODOT for verification; documenting and signing all test results as required on ODOT forms; and retaining testing samples until the Project Manager authorizes release of the samples.
 - b. **Project Managers** have the authority and responsibility to enforce the provisions of the contract; oversee the Quality Control Compliance Specialist; ensure that the project meets the requirements specified in the contract; ensure that all required tests are performed, documented and submitted; inform the QAC of project schedules, current quantities and anticipated sampling requirements so that verification testing can be performed; ensure that the contractor's QC program meets required standards by performing inspections of contractor's personnel, testing procedures, and testing equipment; ensure that the contractor and Region Quality Assurance Laboratory is notified in writing within 5 working days of an IA/Verification sample's completion, as to which backup samples may be discarded or that an investigation is in progress; and upon completion of an investigation, inform the contractor in writing which backup samples may be discarded.

- c. **Region Quality Assurance Team** is required to serve as a resource for the PM's, inspectors, technicians, and other agencies and contractors; maintain uniformity in construction and testing activities; perform all IA and verification testing; properly document on ODOT forms according to section 3 criteria; calibrate or verify calibration of all nuclear moisture density gauges for ODOT, industry, and other agencies; administer the Region's radiation safety program; troubleshoot construction problems related to materials; recommend changes to mix designs; assist in the technician certification program; oversee Region testing facilities; inspect contractor facilities and/or technicians; assist in QC laboratory certification; and retain IA/Verification splits until notified by the PM.
- d. **Construction section** duties include: support of the QA program by coordinating training and certification for technicians, and by certifying all testing labs associated with ODOT construction projects; administer the proficiency sample program; and provide third-party dispute resolution, according to the QA program, when necessary.

43. From May 1999, until his unlawful termination in January 2008, Relator Perry held the position of Assistant Quality Assurance Coordinator (QAC), with responsibility for testing construction materials, evaluating test results for compliance with specifications, maintaining records of received material samples and test results, conducting research studies on materials, assigning and reviewing work, computing and analyzing test results, maintaining, repairing and calibrating laboratory and field testing machines and equipment, performing nuclear gauge calibration and/or verification of calibration for nuclear moisture-density gauges

for the ODOT and other agencies, observing, monitoring, and counseling subordinates in their performance to promote accuracy and adherence to specified procedures, reviewing contractor Quality Control programs including Soils, Aggregate, PCC paving, Structural Concrete, Asphalt, and other highway construction materials, and reviewing and recommending any changes to the Quality Assurance Coordinator regarding contractor requests for JMF changes during production of asphalt mixes.

44. In his QAC position, plaintiff was uniquely situated to observe and document defendants' false and fraudulent conduct with respect, in particular, to failing to conduct appropriate tests on appropriate materials, failing to report inadequate results, doctoring test results to appear passing, failing to rework sections of failing materials, allowing substandard failing materials to be used to complete projects, completing contract change orders to cover up failing materials, and failing to use accurately calibrated equipment to achieve accurate test results.

C. Importance of Contract Specifications to Road Quality and Safety

45. In roadway construction, it is crucial that the foundation is structurally sound, having met minimum construction specification requirements. It is further critical that the incremental addition of layers of subsequent materials also meet the minimum construction specification requirements. Failure to follow this step-by-step, bottom to top process renders the foundation unable to support the subsequent layers in a manner which allows for maximum longevity of the wearing surface. Though these materials are life limited, the failure to meet specifications in the orderly construction process greatly diminishes the time frame in which these materials break down, or fail prematurely.

46. Foundation soundness is dependent on two equally important elements. The first being the materials, including soil, aggregate, pavement, concrete, and asphalt. The second element is the consolidation of the materials, which requires that the materials are layered and compacted to a minimum construction specification requirement. The specifications for requirements such as force, temperature control, binder additives, compactor size and minimum coverage are all outlined in the contract specifications, and state and federal regulations applying to each project.

47. Incremental steps are crucial to the road construction process. If the base levels fail specification, subsequent levels of construction will also experience failure. In essence, without a proper foundation the entire project is in jeopardy of failure.

D. Defendants' Failure to Ensure Contract Compliance

48. In administering various contracts, Defendants are required to assure that the contractors' work and materials conformed to a variety of federal and state highway construction specifications, designed to ensure the integrity of the highway components, including materials and workmanship. In building and maintaining state surface transportation, defendants must comply with both federal regulations as set forth in Title 23: Highways, Part 637 Construction Inspection and Approval, and state specifications as set forth in 2002 Oregon Standard Specifications for Construction, and The Manual of Field Test Procedures. Since at least 1998, defendants violated one or more of the federal and/or state regulations in the construction and/or maintenance of the projects at issue in this case.

49. Failing, non-compliant materials or parts of the roadway prism (3-D) include, but are not limited to, **roadbed** (complete excavations and embankment for the sub-grade, including

ditches, side slopes, and slopes rounding, if any); **base** (a course of specified material of specified thickness placed below the pavement); surfacing (the course or courses of material on the traveled way, auxiliary lanes, shoulders, or parking areas for vehicle use); and **bridge** (a single or multiple span structure, including supports, that carry motorized vehicles, pedestrians, or utilities on a roadway, walk or track over a watercourse, highway, railroad or other feature).

50. The parts identified in the preceding paragraph consist of soils, aggregate, PCC paving, structural concrete, asphalt, and other highway construction materials, hereafter referred to as the “materials.”

51. The surface transportation at issue in this case is substandard/defective because it was built in violation of contractually mandated specifications. Each step of the construction process is subject to set specifications. The specifications are designed to be consecutive, with each specific step following the previous step. One of the specifications is that in order to move forward on the project, each prior phase or step must pass specification requirements.

52. The following projects, performed by the identified contractor defendants, contained defective materials and/or workmanship which fail to meet federal and state specifications:¹

ODOT Contract	Federal Contract/Date	Project Name/Identifier	Contractor/Amt.
13343	NH-OTIA-S041(021) 4/5/2007	US26: Rush Creek - Antone - Bundle A51	Tidewater Contractors, Inc. \$9,399,514.74

¹ A list of the individual defendant Project Managers, Assistant Project Managers, Assistant Managers, QACs and QAEs for each of the listed contracts is attached hereto as Exhibit A.

13334	X-NH-STP-S004 (104) 2/22/2007	US97: China Hat Rd-Baker Rd./Lava Butte	Hooker Creek Asphalt & Paving \$4,170,000.00
13332	NH-STP-S007(039) 2/22/2007	US20: Hampton to Glass Butte	Roy L. Houck Construction Company \$4,991,193.50
13311	NH-OTIA-S018 (025) 12/7/2006	OR58: US97 Overcrossing	M.J. Hughes Construction \$3,613,764.82
13302	OTIA-HPP-S004(093) 11/16/2006	Redmond Reroute Unit 1, Phase 2	Oregon Mainline Paving, LLC \$24,559,555.55
13200	X-BRF-NH-S019(018) 10/27/2005	OR 126: Prineville Crooked River Bridge #02761	Jal Construction, Inc. \$3,140,964.19
13189	FH-NH-S004(089) 11/10/2005	US 97 @ S.Century Drive, Sunriver	Hap Taylor & Sons, Inc. \$8,272,669.00
13185	X-BRF-S019(018) 10/27/2005	OR 31: Silver Creek Bridge	Steve Coats Construction, Inc. \$858,806.15
13170	OTIA-S050(007) 8/11/2005	OR 39: Klamath Falls - Malin Hwy	Staker and Parson Companies, dba Klamath \$535,520.50
13165	OTIA-S004(086) 6/23/2005	US 97: Redmond Reroute, Phase 1, Unit 1 B	Hap Taylor & Sons, Inc. \$5,795,637.61
13157	X-TEA-STP-C051(056) 6/23/2005	OR140: 12 Mile Rd - Adel, US395: Sailboat Ranch NCL Lake	Tidewater Contractors, Inc. \$4,968,900.38
13156	X-BRF-STP-S021(011) 6/23/2006	OR 66: Klamath River - Spencer Bridge	Wildish Standard Paving \$6,126,465.40
13151	X-NH-S000-(255) 5/26/2005	Bend-Sisters Preservation	Hooker Creek Asphalt & Paving \$2,274,496.50
13137	X-NH-S041(016) 4/28/2005	US26: Laughlin Road to Marks Creek (Mix went to QCCS' home)	Hooker Creek Asphalt & Paving \$3,195,486.42
13077	OTIA-S0-S000(238) 12/9/2004	US 97/26 Willow Creek - Depoe Rd	Hap Taylor & Sons, Inc. \$3,698,752.48
13072	OTIA-S0-S015(023) 12/9/2004	OR 126: Glacier-Highland Couplet	Hap Taylor & Sons, Inc. \$8,452,287.90
13056	NH-OTIA-S004 (096) 11/2/2004	US 97: Spring Creek Hill - N Shady Pine	Elting, Inc. \$20,654,458.77

13050	X-SO-STP-S041(015) 10/14/2004	OR 126: West Powell Butte Passing Lanes	Fisher Land Co., dba Oakridge Sand & Gravel, Inc. \$1,995,445.00
13040	OTIA-S004(080) 8/12/2004	US 97: Nevada Ave to Green Springs Dr.	Hamilton Construction \$12,160,733.00
13039	OTIA-S002(063) 8/26/2004	I-84 over US30 at The Dalles	J.W. Fowler Co. \$3,589,941.10
13037	OTIA-SO-LOC-S005(042) 7/22/2004	OR 19: Rock Creek at Olex	Crestline Construction Company LLC \$3,428,015.30
13032	X-STP-S004(077) 7/22/2004	US 97: Riley Bridge Bend #01679	Hap Taylor & Sons \$168,482.40
13030	X-NH-S020(014) 7/22/2004	OR 140: Jct. OR39/OR140 Hwy-Ritter Road	Tidewater Contractors, Inc. \$3,129,801.66
13022	X-STP-S021(010) 5/27/2004	OR 66: Klamath River Bridge	Klamath Pacific Corporation \$2,368,771.75
13003	FH-STP-S270(014) 4/22/2004	Doak Mt.	Elting, Inc. \$9,114,318.81
12994	X-OTIA-BRO-STP- S293(001) 4/22/2004	Willowdale - Antelope	Carter & Company \$759,357.00
12990	OTIA-S000(209) 4/27/2004	Mt. Hood-Chemult	Wildish Standard Paving \$30,537,040.00
12985	X-STP-S000(219) 3/25/2004	Cotton Wood- Fremont	J.C. Compton Contractors, Inc. \$4,092,280.60
12951	I-STP-S004(74) 1/22/2004	US 197: Tooter Creek Bridge #0p155	Thompson Bros. Excavating, Inc. \$108,930.00
12940	X-IM-S002(061) 12/18/2003	I-84: District 9 Rock Fall (MP 81)	Holm II, Inc. \$444,506.87
12939	X-NH-S426(002) 12/18/2003	Drainage Ditch - Culvert Bridge #02246	LTM Incorporated \$512,293.90
12925	OTIA-S370(001) 11/6/2003	O'Neil Highway	Hooker Creek Asphalt & Paving \$2,332,233.00

12924	X-PLH-NH-S053(018) 10/23/2003	US26: Badger Creek - Sidwalter Rd.	Hooker Creek Asphalt & Paving \$1,115,511.00
12907	HPP-NH-S042(15) 10/9/2003	Biggs-Wasco & Grass Valley	J.C.Compton Contractor, Inc. \$4,831,074.56
13358	X-NH-S270(025) 4/12/2007	OR 140: Lakeshore Drive - Green Springs Hwy	CPM Development Corporation \$2,284,883.66
13312	X-NH-S016(027) 12/14/2006	US 20: Cold Springs Cutoff Road to Cascade Meadow	High Desert Aggregate & Paving \$2,039,500.00
13297	X-FH-SO-S053(022) 10/12/2006	US 26: Mill Creek - Jefferson County Line	Jal Construction, Inc. \$724,688.17
13257	X-NH-SO53(021) 5/18/2006	US 26: Warm Springs River - Warm Springs Grade	Hooker Creek Asphalt & Paving \$2,649,966.00
13085	OTIA-S004(085) 1/27/2005	US 97 Redmond Reroute Phase 1, Unit 1	Jal Construction, Inc. \$1,157,540.70
13305	X-BRF-OTIA-S00(097) 11/09/2006	US 97 Willowdale-Madras Bridge Bundle 453	High Desert Aggregate and Paving, Inc. \$ 2,436,026.50
12905	OTIA-S361(2) 10/09/2003	Culver Highway Preservation Section	Roy L. Houck \$ 1,760,739.29
12884	X-NH-S004(66) 7/24/2003	Grandview Dr.- Nels Anderson Place	Hap Taylor & Sons, Inc. \$ 1,207,864.47
12876	X-NH-S004(70) 6/26/2003	South Bend Weigh & Safety Station	Hooker Creek \$ 909,909.00
13374	X-NH-S020(018)	OR140: Drews Gap - Maddock Corner	Roy L. Houck Construction Co. \$2,381,995.00

VI. APPLICABLE LAW

A. Federal Law

53. Title 23 of the Code of Federal Regulations pertaining to Highways prescribes the policies, procedures and guidelines for highway construction, the purpose of which is to assure

the quality of materials and construction in all Federal-Aid highway projects in the National Highway System. 23 C.F.R. § 637.201.

54. Pursuant to 23 C.F.R. § 637.205, each State transportation department shall develop a quality assurance program which will assure that the materials and workmanship incorporated in to each Federal-Aid highway construction project on the National Highway System are in conformity with the quality requirements of the approved plans and specifications.

55. Pursuant to 23 C.F.R. § 637.207, each State transportation department's quality assurance program shall provide for an acceptance program, and an independent assurance program.

56. The acceptance program must consist of: (A) frequency guide schedules for verification sampling and testing, which give general guidance to personnel responsible for the program; (B) identification of the specific location in the construction project where verification sampling and testing is to be accomplished; (C) identification of the specific attributes to be inspected which reflect the quality of the finished product.

57. The independent assurance program evaluates the qualified sampling and testing personnel and the testing equipment. The testing equipment is evaluated by calibration checks, split samples, or proficiency samples. 23 C.F.R. § 637.207(a)(2)(I).

B. State Law

58. The Oregon State quality assurance guidelines are contained in the Manual of Field Test Procedures, also known as the Brown Book.

59. The Brown Book places responsibility for quality assurance, i.e. the oversight of quality control activities by the contractors to assure compliance with contract specifications. Manual of Field Test Procedures, Section 2(A).

60. Technicians responsible for performing testing procedures are required to be certified. Certification may be revoke for just cause, including, negligence or abuse of their responsibilities. Section 2(A), Section IV, p. 10.

61. Negligence is defined as unintentional deviations from approved procedures which may or may not cause erroneous results. *Id.*, p. 17.

62. Abuse is defined as intentional deviations from approved procedures. *Id.*, p. 17.

63. In every case at every stage of the construction of the surface transportation, where the contractor's split and/or the QAC's split test results are not within IA parameters, the Project Manager must evaluate the results and resolve the discrepancy. *Id.*, p. 5.

64. When an issue of abuse or neglect is suspected, technicians have a responsibility to report to the ODOT Quality Assurance Engineer. Technicians are encouraged to first try to resolve the matter at the project level before invoking the complaint process. Manual of Field Test Procedures, Appendix F.

65. Oregon also maintains the Oregon Standard Specifications for Construction handbook, also know as the "Wine Book." The Wine Book dictates and regulates the quality of materials used in road construction projects in Oregon.

66. Section 00165 - Quality of Materials - prohibits the use of materials that do not conform to the approved specifications as set by the Engineer. The specifications for field tested and non-field tested materials are set out in the ODOT Manual of Field Test Procedures, those

that are not field-tested can be found in the Nonfield Tested Materials Acceptance Guide. § 00165.10.

67. Contractors receive incentive payments for the production of quality materials, therefore, they have a vested interest in seeing that test results come back within the specifications. Failing test results, on the other hand, result in price reductions from 25% to 100% (no payment) and/or costly removal of the failing materials. § 00165.50 . Each stage of construction has a separate section of the Wine Book devoted to its specifications, testing procedures, and consequences.

VII. VIOLATIONS

68. Defendants were required by the terms of the contracts with the federal government to follow the requirements of Code of Federal Regulations Title 23: Highways, and the ODOT Quality Assurance Program in the construction of the surface transportation of the State of Oregon's Interstates, U.S. Routes, and Oregon Routes made from the materials described above.

69. The following are specific violations referenced by contract number. Specifications or regulations violated are listed according to "specification number," pursuant to Oregon Standard Specifications for Construction (2002):

23 C.F.R. § - Violation	Contracts
§ 330 - Failing Earthwork	13156, 13050, 13022, 12905, 13311, 13302, 13297, 13200, 13189, 13185, 13165, 13157, 13040, 13039, 13037, 12951, 12924, 12907
§ 540 - Failing Concrete Bridges	13311, 13305, 13185, 13165, 13157, 13156, 13137, 13077, 13050, 13039, 13037, 12939, 12990, 13032, 13040, 13056, 13189, 13200, 13302

§ 641 - Failing Base Aggregate	13037, 12905, 12876, 13343, 13311, 13302, 13189, 13156, 13077, 13050, 13039, 12994, 12990
§ 745 - Failing HMAC	13374, 13302, 13200, 13165, 13077, 13022, 13030, 13085, 12924, 12907, 12905, 12884, 12925, 12985, 12990, 13003, 13037, 13039, 13050, 13056, 13072, 13137, 13151, 13157, 13170, 13189, 13257, 13312, 13334, 13343, 13358, 13072
§ 710 and § 735	13332
§ 596	12940, 13165
Violation of the use of State-Owned Materials	13137

70. In addition to the violations set out above, in February/March 2006, Relator Perry was directed by defendants Kirkland and Mullis to provide a “memo to the file” for project number 12907 to cover up for missing documentation. According to defendant Kirkland, the project was “short on test documents from the QA”, so Relator Perry needed to “write something that explained that Perry had performed one more test.” Kirkland told Perry that he would do it, but he was not working for ODOT during the time in question, so it would “look better” if the memo came from Perry.

71. Perry refused to write the memo, so defendant Mullis stepped in and directed Perry to write the memo. Perry wrote a memo which noted the deficiency in required QA testing for the project. Mullis repeatedly told Perry in writing that he wanted a memo that did not mention the lack of testing. Perry again refused. Mullis cited a set of diary pages provided by the PM claiming that Perry had been on the project during the time in question.

72. Perry reviewed all of the time cards from the Region 4 QA staff, which confirmed that no one from Region 4 had been on the project to perform the required testing.

73. In late August 2007, Relator Perry was instructed by supervisor defendant Cole Mullis to falsify test results following a contamination of Perry's test samples by Kirkland. Rather than obtaining new test samples for the two projects being tested, Mullis told Perry to "pick out" what contamination he could see, then complete the testing so that QA would have numbers to report to the PM and the contractors. The contaminated and damages samples were used for verification. No notations or comments were made on the test documents to indicate that the samples had been compromised.

74. Relator Perry is also aware of more than one occasion on the projects referenced above in which compaction tests were run with inaccurately calibrated nuclear density gauges by defendant Kirkland and others. In spite of Perry's informing ODOT and the contractors that the gauges were not properly calibrated, the results of the unreliable testing were passed off as valid test results.

75. The consequences of defendants' violations are illustrated in Exhibit B attached hereto.

VIII. CLAIM FOR RELIEF

Violations of the False Claims Act - 31 U.S.C. § 3729(a)(1) and (a)(2)

76. The allegations in the preceding paragraphs are re-alleged as if fully set forth below.

77. Defendants knowingly submitted or caused to be submitted false claims for payment or approval to the United States in violation of 31 U.S.C. § 3729(a)(1).

78. Defendants, by and through their officers, agents, and employees, knowingly made, used, or caused to be made or used, false records statements to obtain Government payment of false or fraudulent claims in violation of 31 U.S.C. § 3729 (a)(2).

79. Every referenced claim for payment and every certificate of conformance or other document certifying compliance with federal and state highway construction regulations submitted by defendants to the United States regarding the highway contracts identified herein were knowingly false claims and/or false documents.

80. Defendants acted with actual knowledge of, or in reckless disregard concerning, the falsity of their certifications and claims for payment that all contract requirements were met. Defendant therefore knowingly violated the False Claims Act, as that term is defined in 31 U.S.C. § 3729(b).

81. The United States Government has been damaged as a result of defendants' violation of the False Claims Act, in that it has paid full contract price on each of the contracts while receiving product that does not meet the contract standard. Further, because the product does not meet contract standards, the United States Government will likely pay twice for all work that needs to be redone before the represented life span of the project.

PRAYER

WHEREFORE, Relator prays, on behalf of himself and the United States of America, for judgment against the Defendants, and each of them, as follows:

1. Treble the amount of damage caused by the defendants as the result of their knowing non-compliance with federally mandated procedures and materials specifications on surface transportation contracts entered into with the United States, including, at a minimum, the

cost of replacing all sub-standard finished road projects with materials that meet the specification requirements and which pass all certification steps.

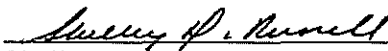
2. A civil penalty in the amount of \$10,000 for each violation of the False Claims Act which occurred prior to September 27, 1999, and a civil penalty in the amount of \$11,000 for each violation of the False Claims Act which occurred thereafter;

3. An injunction ordering defendants to institute and enforce effective quality control measures to prevent future violations;

4. Such other injunctive relief as the Court determines is appropriate; and

5. Relator further prays for a statutory share of either 25% or 30 %, depending upon whether the United States intervenes, of all amounts collected or otherwise recognized by the United States in connection with the information Relator has supplied, together with his attorney fees, expenses of litigation and costs of suit.

CRISPIN EMPLOYMENT LAWYERS


Shelley D. Russell, OSB No. 94068
Of Attorneys for Plaintiff-Relator
(503)293-5767
shelley@employmentlaw-nw.com

CERTIFICATE OF SERVICE

I hereby certify that I served the foregoing COMPLAINT on:

Civil Process Clerk
Office of the United States Attorney
1000 SW Third Avenue, Suite 600
Portland, Oregon 97204
(503)727-1000

by the following indicated method(s):

_____ by mailing full, true, and correct copies thereof in a sealed envelope with postage prepaid thereon, addressed as above stated, which is the last-known office address of the attorney, and deposited with the United States Postal Service at Portland, Oregon, on the date set forth below.

XX by causing full, true and correct copies thereof to be hand-delivered to the attorney at either the attorney's last-known office address as above stated, on the date set forth below, or at another location where the attorney is known to be, on the date set forth below.

_____ by e-mailing full, true and correct copies thereof to _____.

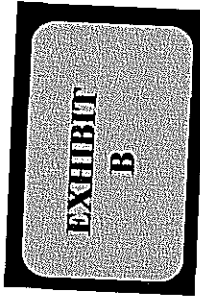
DATED this 3rd day of October, 2008.

CRISPIN EMPLOYMENT LAWYERS

By: /s/ Shelley D. Russell
Shelley D. Russell, OSB No. 94068
Of Attorneys for Plaintiff-Relator

Contract	PM	Asst PM	AM	QAC	QAE
12876	Jon Heacock	Norman C. Butch Hansen	Gary Farnsworth	Reid Meritt	Jeff Gower
12884	Norman C. Butch Hansen, Interim PM		Gary Farnsworth	Reid Meritt	Lucinda Moore
12905	Jon Heacock	Pat Cimmiyotti	Gary Farnsworth	Reid Meritt	Lucinda Moore
12907	Jon Heacock	Pat Cimmiyotti	Gary Farnsworth	Reid Meritt	Lucinda Moore
12924	John Scott	Pat Cimmiyotti	Gary Farnsworth	Reid Meritt	Lucinda Moore
12925	Butch Hansen		Gary Farnsworth	Reid Meritt	Lucinda Moore
12939	Lee Jordan, PM (URS)	Randi Kobernik, Local Liaison	Mike Stinson	Reid Meritt	Lucinda Moore
12940	John Scott	Pat Cimmiyotti	Gary Farnsworth	Reid Meritt	Lucinda Moore
12951	John Scott	Pat Cimmiyotti	Gary Farnsworth	Reid Meritt	Lucinda Moore
12965	Jon Heacock	Norman C. Butch Hansen	Gary Farnsworth	Reid Meritt	Lucinda Moore
12990	David Davies, DEA			David Kirkland	Lucinda Moore
12994	Jon Heacock		Gary Farnsworth	David Kirkland	Lucinda Moore
13003	Tom Feeley, PM			David Kirkland	Lucinda Moore
13022	Tom Feeley, PM			David Kirkland	Lucinda Moore
13030	Tom Feeley, PM			David Kirkland	Lucinda Moore
13032	Jon Heacock			David Kirkland	Lucinda Moore
13037	Jon Heacock	Pat Cimmiyotti		David Kirkland	Lucinda Moore
13039	Jon Heacock	Pat Cimmiyotti	Gary Farnsworth	David Kirkland	Lucinda Moore
13040	Glen Schoessler OBDP			David Kirkland	Lucinda Moore
13050	Jon Heacock		Gary Farnsworth	David Kirkland	Lucinda Moore
13056	Tom Feeley		Gary Farnsworth	David Kirkland	Lucinda Moore
13072	Jon Heacock		Gary Farnsworth	David Kirkland	Lucinda Moore
13077	David Davies, DEA		Gary Farnsworth	David Kirkland	Cole Mullis
13085	Jon Heacock		Gary Farnsworth	David Kirkland	Cole Mullis
13137	Jon Heacock	Pat Cimmiyotti	Gary Farnsworth	David Kirkland	Cole Mullis
13151	Jon Heacock		Gary Farnsworth	David Kirkland	Cole Mullis
13156	Tom Feeley		Mike Stinson	David Kirkland	Cole Mullis
13157	Ian Machan, PM, OTAK	Stephanie Serpico, Consultant PM	Gary Farnsworth	David Kirkland	Cole Mullis
13165	Jon Heacock		Gary Farnsworth	David Kirkland	Cole Mullis
13170	Tom Feeley		Gary Farnsworth	David Kirkland	Cole Mullis
13185	Jon Heacock		Gary Farnsworth	David Kirkland	Cole Mullis
13189	Jon Heacock		Gary Farnsworth	David Kirkland	Cole Mullis
13200	Pat Cimmiyotti			David Kirkland	Cole Mullis
13257	Ron Snell	Pat Cimmiyotti		David Kirkland	Cole Mullis
13297	Ron Snell	Pat Cimmiyotti		David Kirkland	Cole Mullis
13302	Ron Snell	Robert Peters	Gary Farnsworth	David Kirkland	Cole Mullis
13305	Ron Snell	Pat Cimmiyotti		David Kirkland	Cole Mullis
13311	Simeon Brubaker OBDP			David Kirkland	Cole Mullis
13312	Ron Snell	Darrell Newton	Gary Farnsworth	David Kirkland	Cole Mullis
13332	Ron Snell	Darrell Newton	Gary Farnsworth	David Kirkland	Cole Mullis
13334	Ron Snell	Darrell Newton		David Kirkland	Cole Mullis
13343	Ron Snell	Pat Cimmiyotti		David Kirkland	Cole Mullis
13358	Tom Feeley			David Kirkland	Cole Mullis
13374	Tom Feeley			David Kirkland	Cole Mullis

EXHIBIT
A

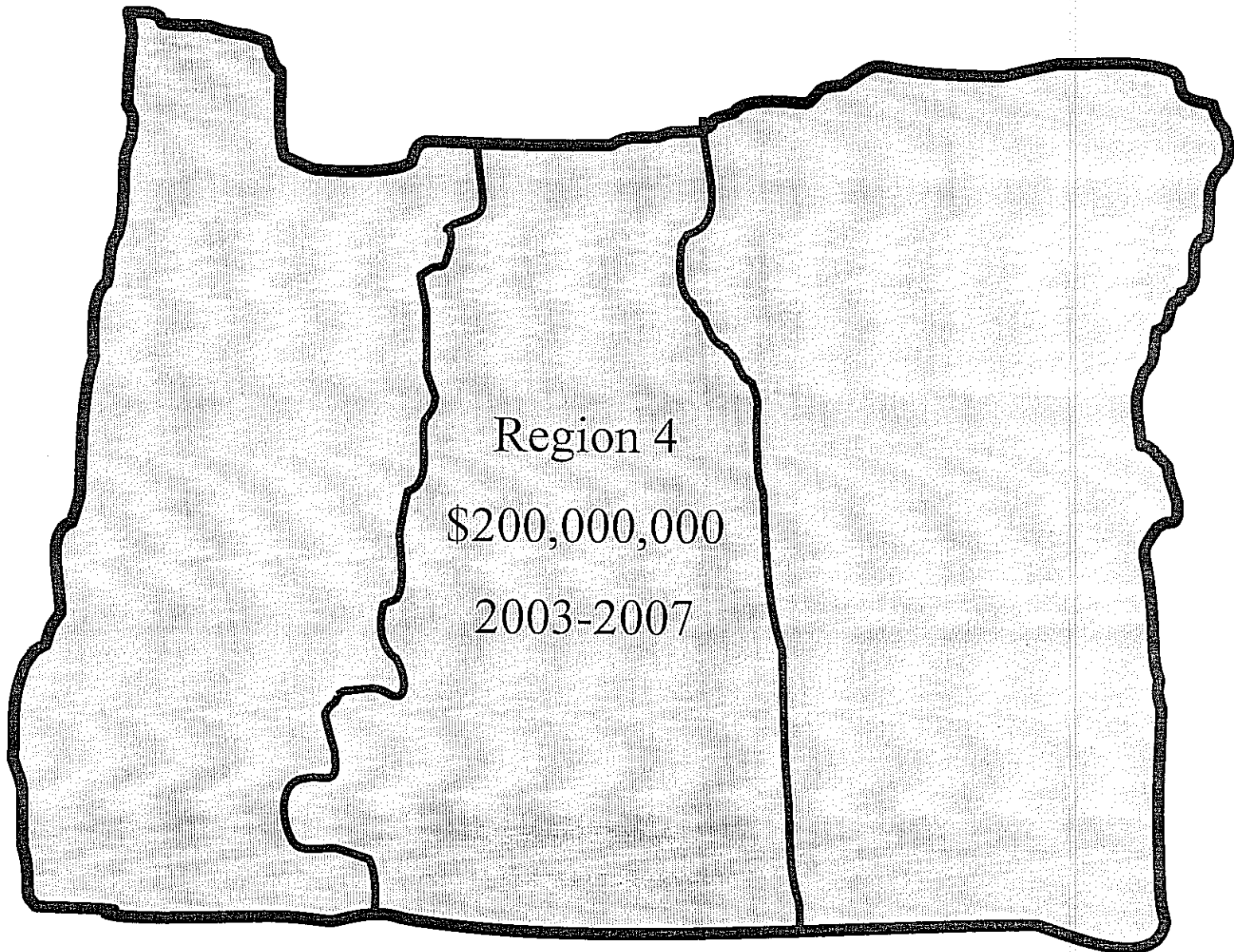


ODOT

Highway Quality Assurance Program

Substandard Materials and
Workmanship

In a 4-year time span, Region 4 alone, had over \$200 million of highway construction projects which did not meet contract specifications.



ODOT's Quality Assurance Program consists of 3 separate entities, each having separate and distinct functions. In order for this program to be successful, each entity must fulfill it's obligation, working together with the intended outcome being the best possible product for the traveling public.

Contractor

Responsible of the actual construction of the project & quality control (QC) testing of the materials and workmanship

Project Manager (PM)

Responsible for enforcing the provisions of the contract

Quality Assurance (QA)

Duty is to perform required IA and verification (QV) testing, ensuring uniformity in construction and testing activities

Unfortunately ODOT has compromised the safety of the traveling public.


Oregon's highways and bridges should be designed and constructed with the mission of providing the safest roadways possible.

In the past several years, Project Managers within ODOT have overridden contract specifications and requirements, compromising the safety of every man, woman, and child who travel our highways and bridges.

In this time of ever-shrinking budgets, every possible effort should be made to ensure that tax payers are receiving quality materials and workmanship on their roadways.

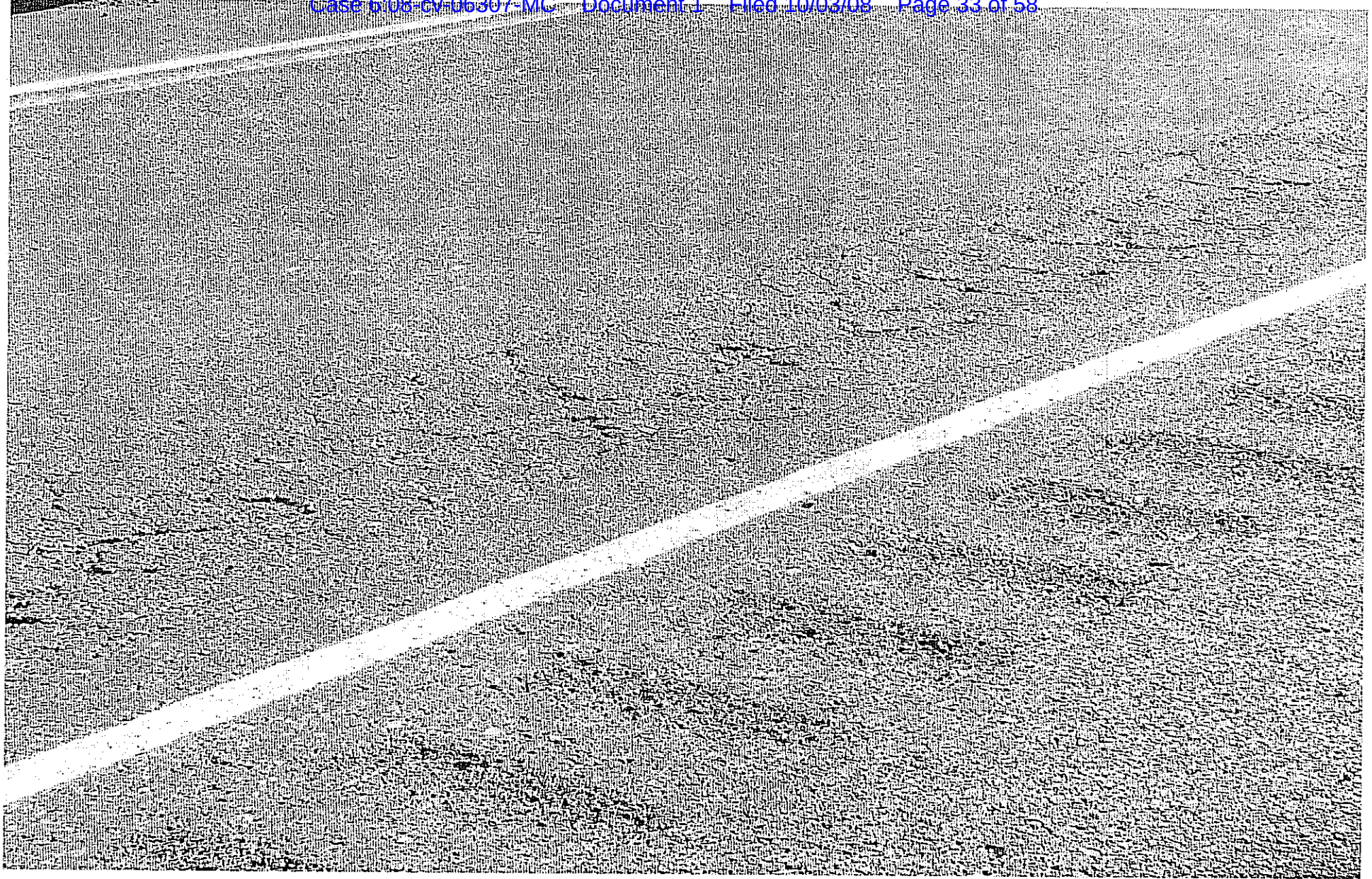
Following are actual highways and bridges, illustrating how compromising contract specifications affects our roadways. Each of these failures has the potential to be catastrophic to the traveling public. There is no excuse for jeopardizing the safety of our citizens.

This project, in 2002, failed HMAC compaction and mix properties. These failures contribute to unstable road surfaces in the form of ruts, slicks and raveling of the pavement.

A grainy, black and white photograph of a multi-lane highway. In the distance, a large truck is visible on the road. The image is heavily textured with noise and artifacts, typical of a low-quality photocopy or scan. The text is overlaid on the lower portion of the image.

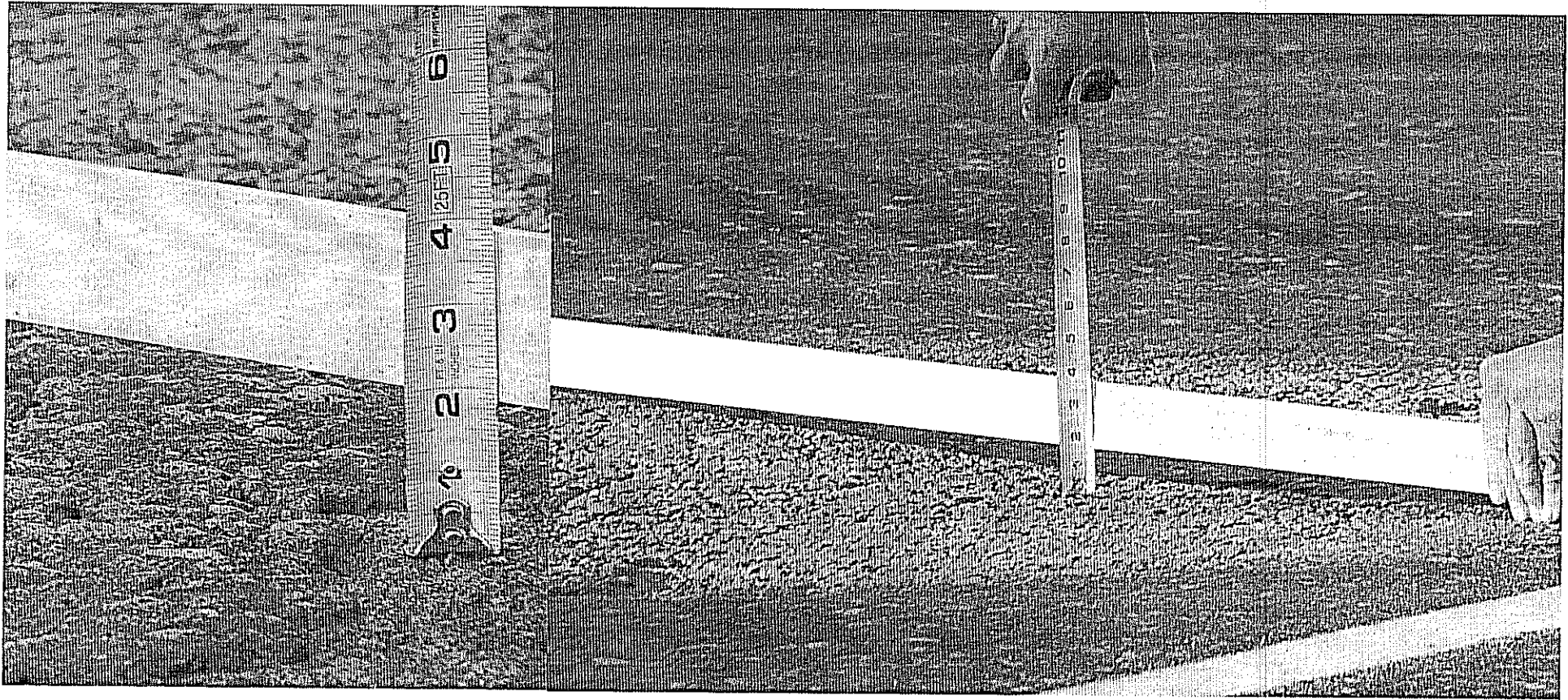
Driver whose pickup/trailer combo
jackknifed on Hwy. 97 says ruts in road
made trailer start to swerve
(NewsChannel 21/Eric Rucker)

Accident occurred end of July, 2008



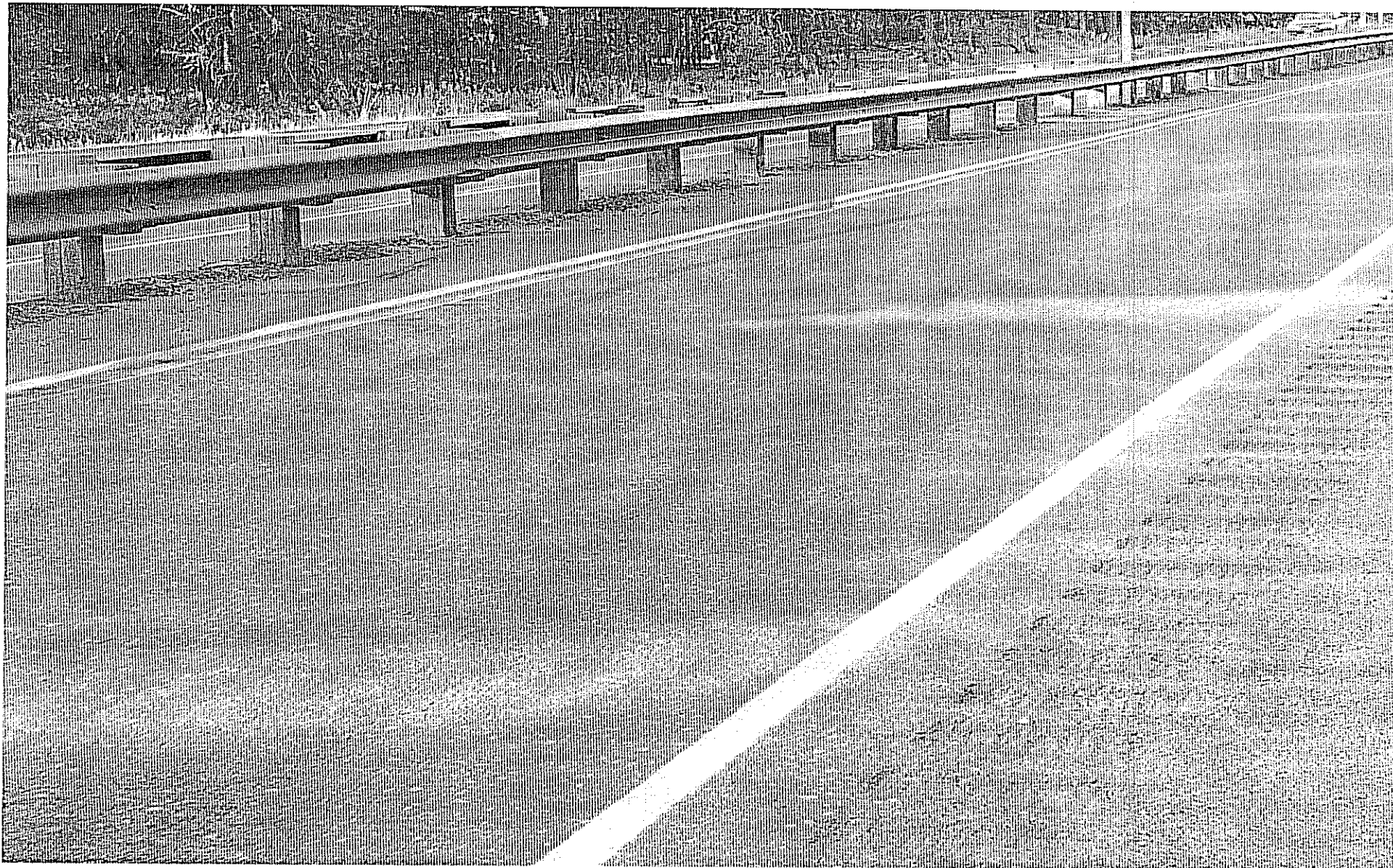
Project 12716

Completed in 2002—pictured here in 2008. Ruts are approximately 2” deep throughout, and surface is cracking out, leaving even deeper holes.



Measuring Ruts with a Straight-Edge

Ruts are evident in the travel lane at the sight of the accident. This area is just prior to the skid marks left by the vehicle involved in the accident. Rutting of this magnitude acts similar to train tracks, in that once the vehicle leaves the rut (track) it is almost impossible to re-enter the rut (track) without a degree of control being compromised (usually in the form of fish-tailing of a trailer being towed by another vehicle).



Skid marks

Skid marks show the path of travel of the vehicle; notice the ruts do not seem to be evident to the traveling public. The marks point to the fact that the vehicle was 'swaying' between the ruts. It hit the guard rail before returning to the travel lane, jackknifing the trailer, losing it's cargo.

NUCLEAR COMPACTION TEST REPORT FOR HMAC

PROJECT NAME (SECTION) Murphy Rd - Lava Butte				CONTRACT NUMBER 12716	
CONTRACTOR OR SUPPLIER Hooker Creek			PROJECT MANAGER Jon Heacock		BID ITEM NUMBER 200
MIX DESIGN NO. 02-003499	JMF PLACEMENT TEMP °C 139-144	LIFT THICKNESS 50 mm	TYPE GAUGE-SERIAL NUMBER Humboldt 1336		MIX NOMINAL SIZE 19mm
MEASURED PLACEMENT TEMP °C 136 c.		PANEL WIDTH 6.0 meters	CONTROL STRIP NO. 12-Feb	LIFT Top	DATE 9/18/02
ROLLER TYPE AND DESCRIPTION (MANUFACTURE, WEIGHT, ETC)					
BREAKDOWN	DD 130				P - PNEUMATIC
INTERMEDIATE	Hyster				TS - TANDEM STEEL
FINISH	DD 130				3WS - THREE WHEEL STEEL
CODES FOR ROLLER TYPES SDV-SINGLE DRUM VIBRATORY DDV-DOUBLE DRUM VIBRATORY					
TEST NUMBER	QV 4 A	B	C	D	E
DATE OF TEST	9/19/02	9/19/02	9/19/02	9/19/02	9/19/02
TEST LOCATION (STATION)	16+764	16+971	17+292	17+502	17+689
DISTANCE LT. OR RT. OF CENTERLINE (METERS)	0.7 Lt.	4.4 Lt.	3.3 Lt.	2.0 Lt.	0.8 Lt.
DIST BELOW GRADE	LIFT THICKNESS	Top 50mm	Top 50mm	Top 50mm	Top 50mm
DENSITY kg/m³	1	2306	2300	2198	2297
Max difference between shots 40 kg/m³	2	2299	2327	2184	2304
AVERAGE DENSITY (LINE 1+LINE 2)/2	3	2303	2314	2191	2301
CORE TO NUCLEAR CORRELATION	4				
MAMD	5	2528	2528	2528	2528
%COMPACTION FOR INDIVIDUAL TESTS (LINE 3 OR 4 / LINE 5) X 100	6	91.1%	91.5%	86.7%	91.0%
SUBLOT OR SECTION LINE 6 AVERAGE	% REQUIRED	89.8%			
REMARKS MAMD taken from lot 2 sub lot 11. Mix Temp. 149c. from plant discharge at 11:03 PM. Nuclear gauge check. ODOT results: 2300, 2327, 2346, 2322 = 2324 kg. Contractors results (Carlson Tech.) 2308, 2335, 2357, 2365 = 2341 kg. Difference 17 kg.					
QUALITY CONTROL	X	VERIFICATION			
CERTIFIED TECHNICIAN (PLEASE PRINT) AND CARD NUMBER Richard H. Pico 775		COMPANY NAME O D O T		SIGNATURE DATE	

Test Report

This test report denotes that compaction failed the required quality verification testing. This one test represents approximately a five-mile section of a two-lane roadway. It is impossible to determine the area of failure, as the contractor was not required to correct this problem. The compaction failure can easily contribute to this excessive rutting, thus causing dangerous conditions to the traveling public.

92%
Required

Roadway Hazards

The following photos illustrate roadway hazards drivers face everyday in Oregon. Causes are listed, as is the location of the construction project. Each of these dangers could have been minimized, or avoided altogether if contract specifications were adhered to.

Rutting or Shoving

Causes: Volumetric properties are out of specification, meaning there is too much asphalt and not enough stone-to-stone contact, which allows the rocks to 'float' and move under the weight of traffic.

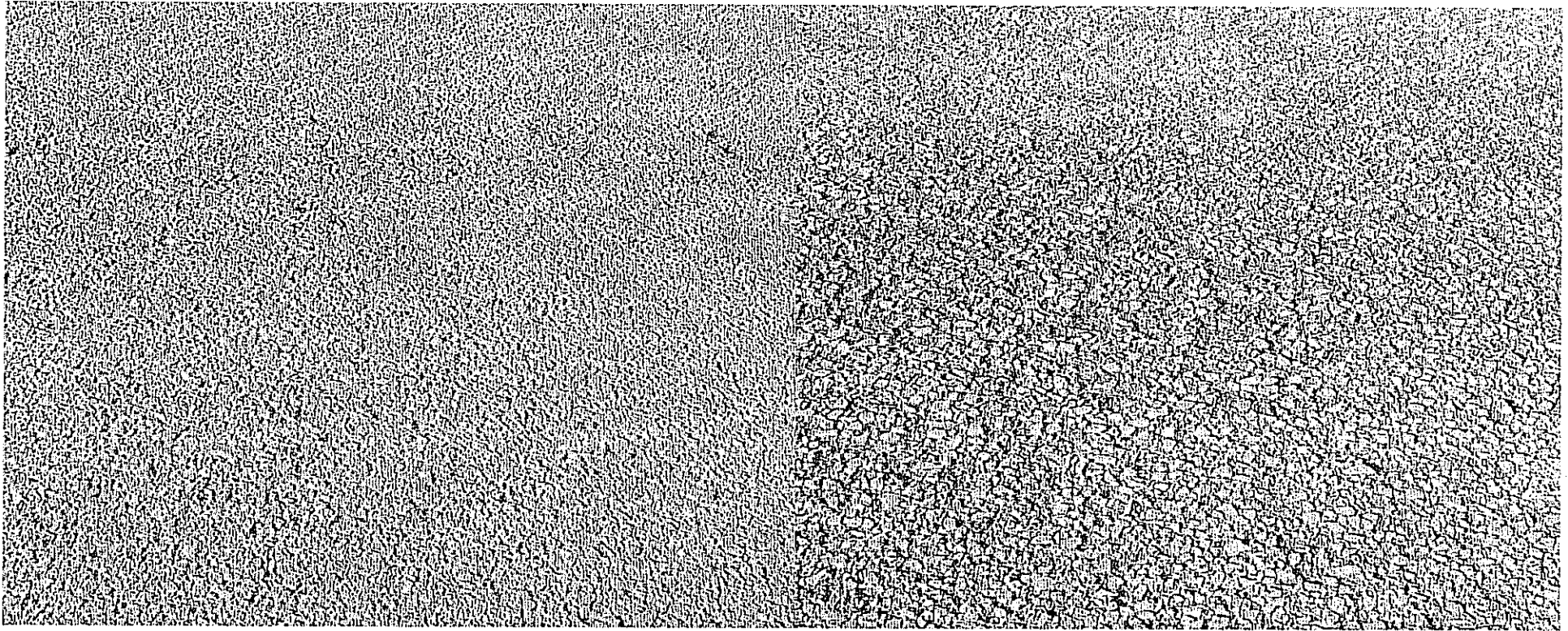


Location: Highway 97 at Cooley Road (Bend)

Project was less than two years old when it began to show excessive movement. This photo shows dangerous ruts and unstable stopping surface. **Notice rut in left tire track is deeper than the right tire track, thus eliminating the claim that the ruts are caused by studded tires and heavy trucks.**

Raveling

Causes: VFA is too low, which means there is not enough asphalt (oil); dust-to-oil ratio is too high, meaning there are too many fines in the mix; mix moisture is too high.



Location: Highway 395, south of Lakeview; both photos are from the same project.

Photo on left shows desired consistency, photo on right shows surface raveling. These photos are taken within 6 months of the completion of the project. Rough area will continue to ravel until no material remains, leaving potholes. Loose rock is picked up vehicle tires and can be thrown through windshields.

Causes: VFA is too low, which means there is not enough asphalt (oil); dust-to-oil ratio is too high, meaning there are too many fines in the mix; mix moisture is too high.

A black and white photograph of a multi-lane highway. In the left lane, there is a prominent, dark, longitudinal rut or track, likely from a tire, which appears to contain loose gravel. The road surface is asphalt. To the left of the rut, there is a concrete barrier. To the right, there is a metal guardrail. In the background, there are trees and a bridge structure. The overall image has a grainy, halftone-like texture.

Location: Highway 97 - Bend Parkway

Raveling is evident at the edge of the left tire track. Loose gravel is dangerous, as it is picked up in tires. It is also a difficult traction surface, making stopping and turning dangerous. Note: This is a \$100 million project which required repairs less than two years after completion, and is slated for complete repaving less than 8 years after completion.

Flushing

Causes: VFA too high or too much asphalt (oil) in the HMAC; as the tires pass over the pavement, the oil comes to the surface, causing a 'slick' patch.

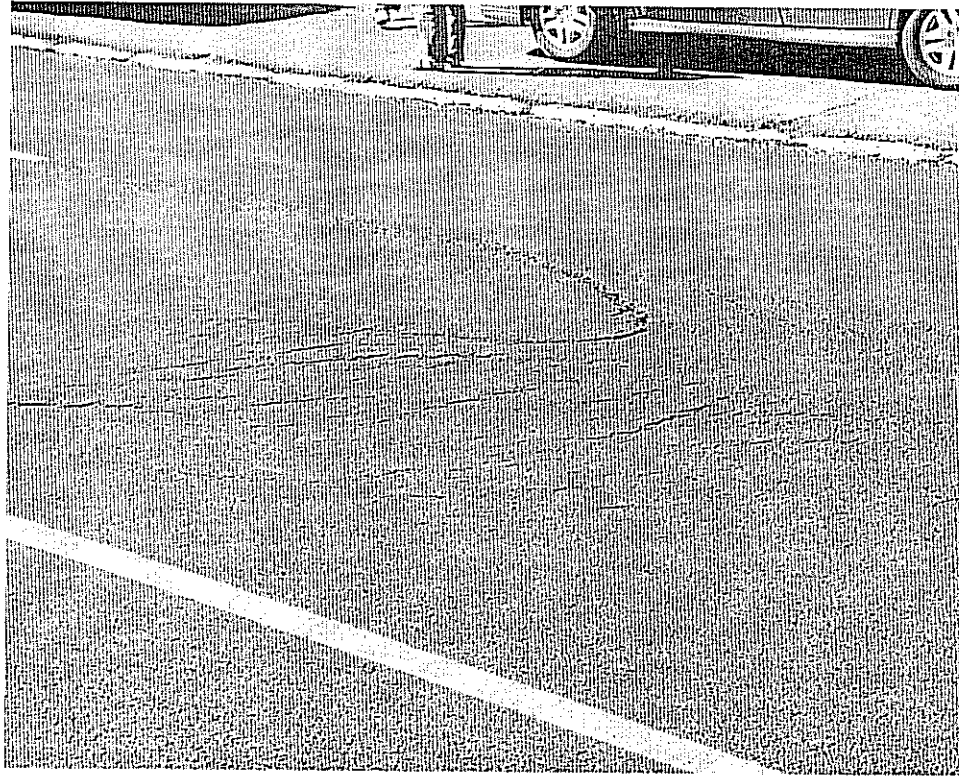


Location: Highway 97—Redmond

These 'slick' areas bring oil to the surface, which create a slippery traction surface, especially as vehicles try to stop. These areas are even more dangerous when wet. Note: This slick appeared almost immediately after completion of this project, as this photo was taken less than 4 months after paving was completed.

Migrating

Causes: The top layer of HMAC did not adhere to the under-layers of HMAC, possibly because wearing surface was compromised by moisture (rain/snow), and low mix-placement temperatures.



Location: Highway 97—LaPine

This roadway surface is unstable, as it is uneven, and will shift under the weight of traffic, especially if a car applies its brakes in this area. This failure occurred even prior to the completion of the project, and has been repaired twice.

Pumping I

Causes: Lack of compaction; too much moisture in the base aggregate and sub-base (earthwork); base aggregate not thick enough.



Location: Highway 20--approximately 70 miles east of Bend

Notice the truck tires making ruts in the base, in front of the paving machine. The base should be completely flat, with no visible deflection. Paving over this base will cause material under the EAC (pavement) to work through the wearing surface.

Pumping II

Causes: Lack of compaction; too much moisture in the base aggregate and sub-base (earthwork); base aggregate not thick enough.



Location: Highway 20--approximately 70 miles east of Bend

Area in the middle of the roadway has mud coming up through the EAC (pavement). These soft areas were present prior to paving, and were not properly dealt with, even though this contract included sub-grade stabilization.

Alligator / Cracking

Causes: Not achieving proper compaction; this type of cracking represents the material under the HMA is moving and shifting under the weight of traffic; moisture creating sub-base to 'pump' up through the wearing surface.

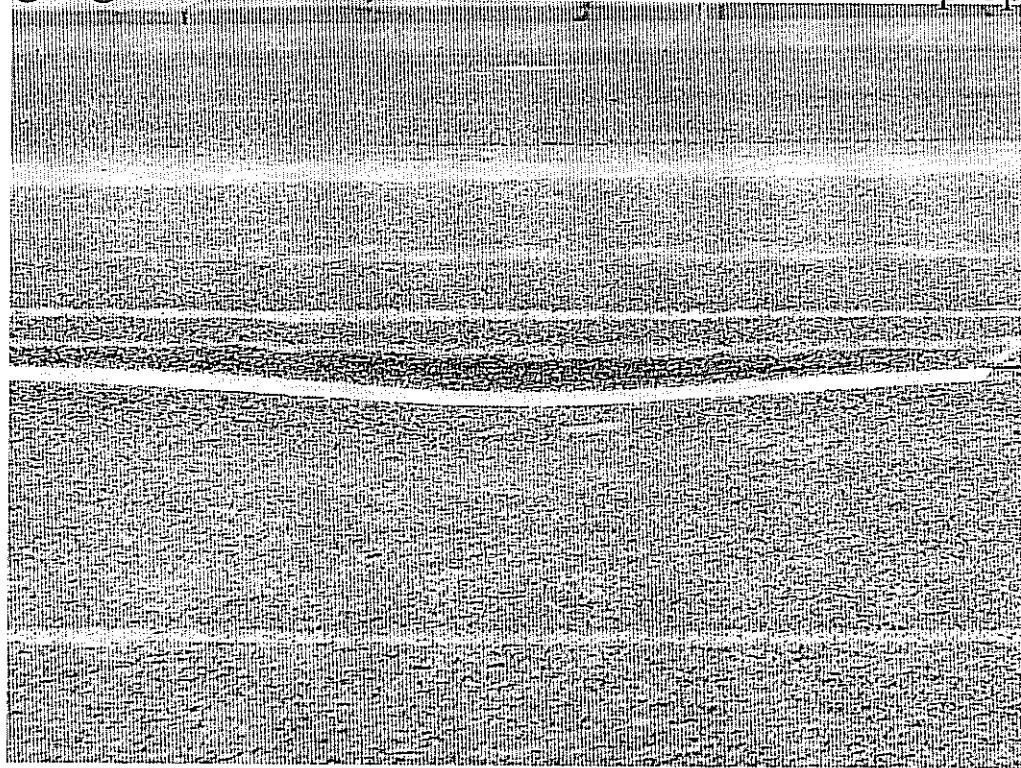


Location: Highway 97—south of Bend, near Cottonwood Summit intersection

Alligator patches loosen and eventually the material is worked out of the area entirely, causing potholes. This roadway is in an area which experiences extreme weather conditions. Moisture works down into the cracks/sub-base, compounding the problem. Hitting-or dodging- these potholes can easily cause vehicles to lose control.

Settlement

Causes: Lack of compaction of sub-base (earthwork or base aggregate); lack of compaction of trench back-fill material; not enough HMAc applied to the roadway; sub-surface void (rotting organic material, or material not consolidated properly).



Location: Highway 97—Redmond

This particular failure is on a brand new wearing surface (less than four months of traffic). The dip is approximately 8' long, and 2" deep. It will continue to settle, causing a larger problem for traffic. The 'lip' of the dip is a traffic hazard for lane changing, as it will catch the tires as the vehicle switches lanes.

Delamination / Pothole

Causes: Volumetric properties are out of specification, with too little asphalt (oil); lacking compaction, which allows moisture in between the layers of HMAC (pavement).

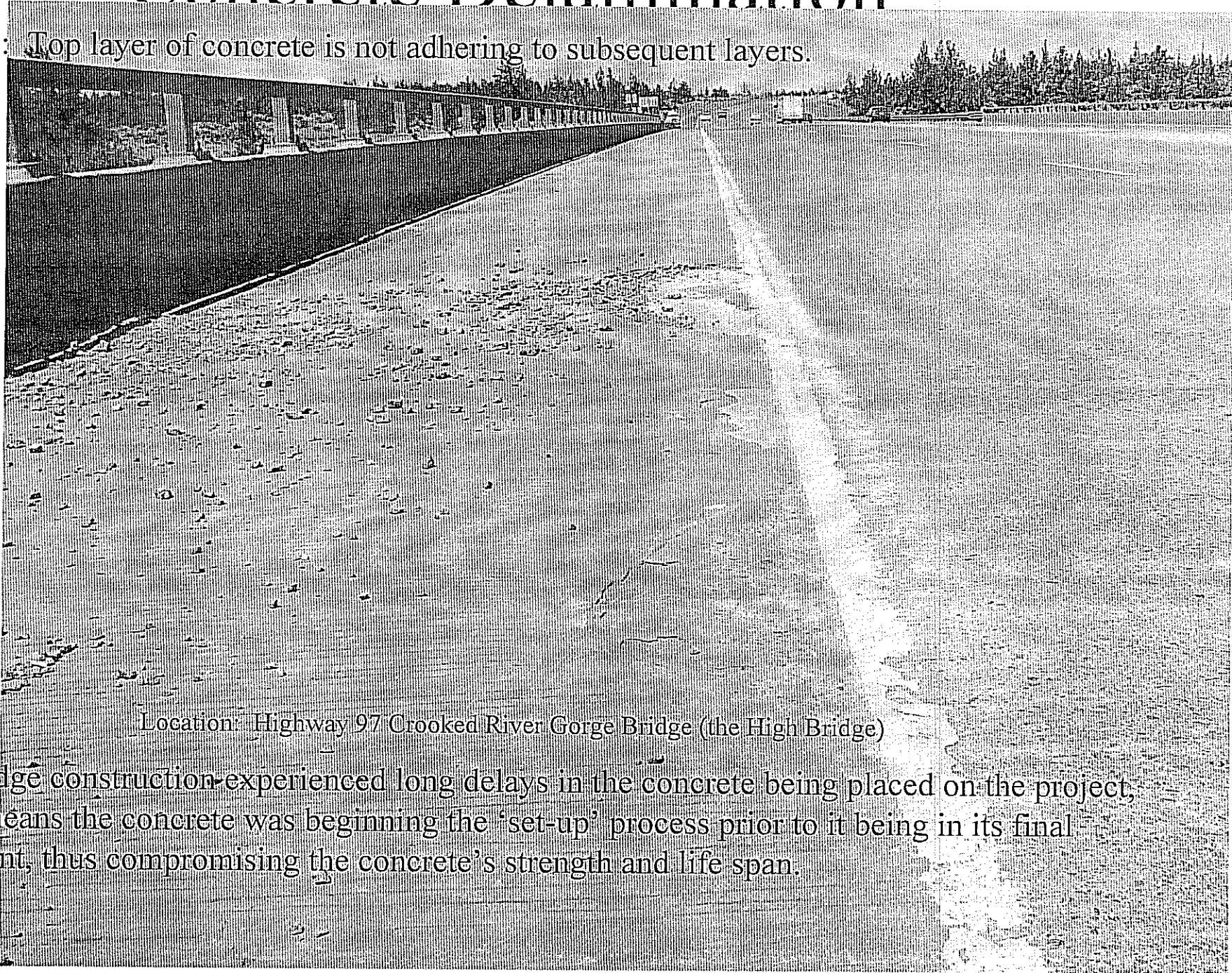


Location: Highway 26—Warm Springs

This roadway required complete repaving in just eight years after completion. It has required patching several times. The records will reflect the quality of materials were in question at the time of paving, as the rock materials were too soft.

Concrete Delamination

Causes: Top layer of concrete is not adhering to subsequent layers.

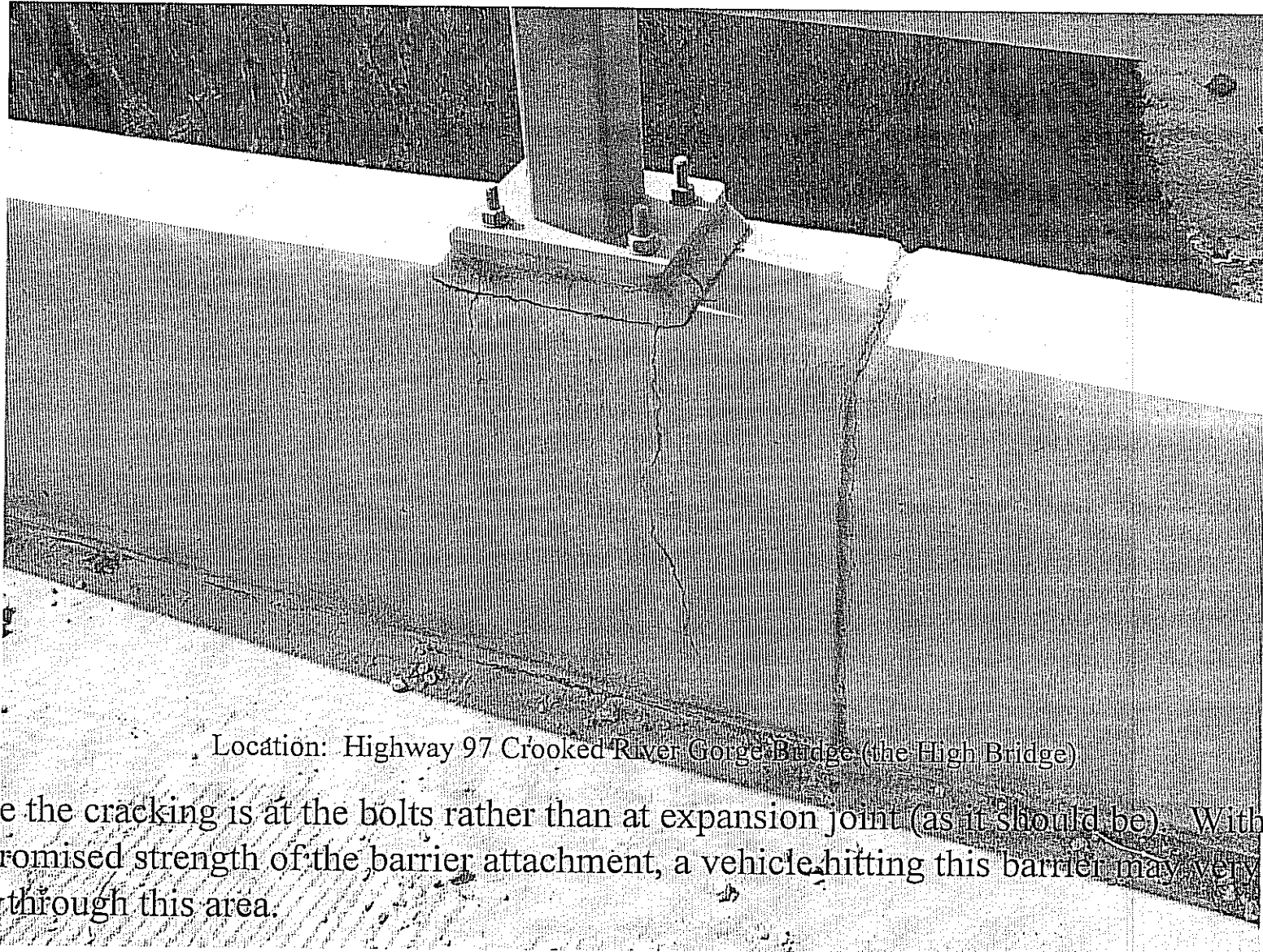


Location: Highway 97 Crooked River Gorge Bridge (the High Bridge)

This bridge construction experienced long delays in the concrete being placed on the project, which means the concrete was beginning the 'set-up' process prior to it being in its final placement, thus compromising the concrete's strength and life span.

Concrete Cracking

Causes: Long delays in concrete placement; improper batching properties.



Location: Highway 97 Crooked River Gorge Bridge (the High Bridge)

Notice the cracking is at the bolts rather than at expansion joint (as it should be). With the compromised strength of the barrier attachment, a vehicle hitting this barrier may very well break through this area.

Causes of Failures

Troubles arise from either **sub-surface** (from the bottom up) or **surface** (from the top down) failures, which cause dangerous changes in the roadway. Some hazards are caused by a combination of both. Below are the technical causes of the failures.

Lack of compaction

Sub-standard materials

Not following temperature/weather specifications

Improper equipment used for construction

Shoddy workmanship

Material not placed at the required moisture (earthwork and base aggregate-sub-surface)

Contract specification changes made to lower requirements and standards

Volumetric properties do not meet specified requirements (HMAC-surface)

Compaction

Proper compaction is possibly the most important factor affecting the highways. Many problems center around compaction issues.

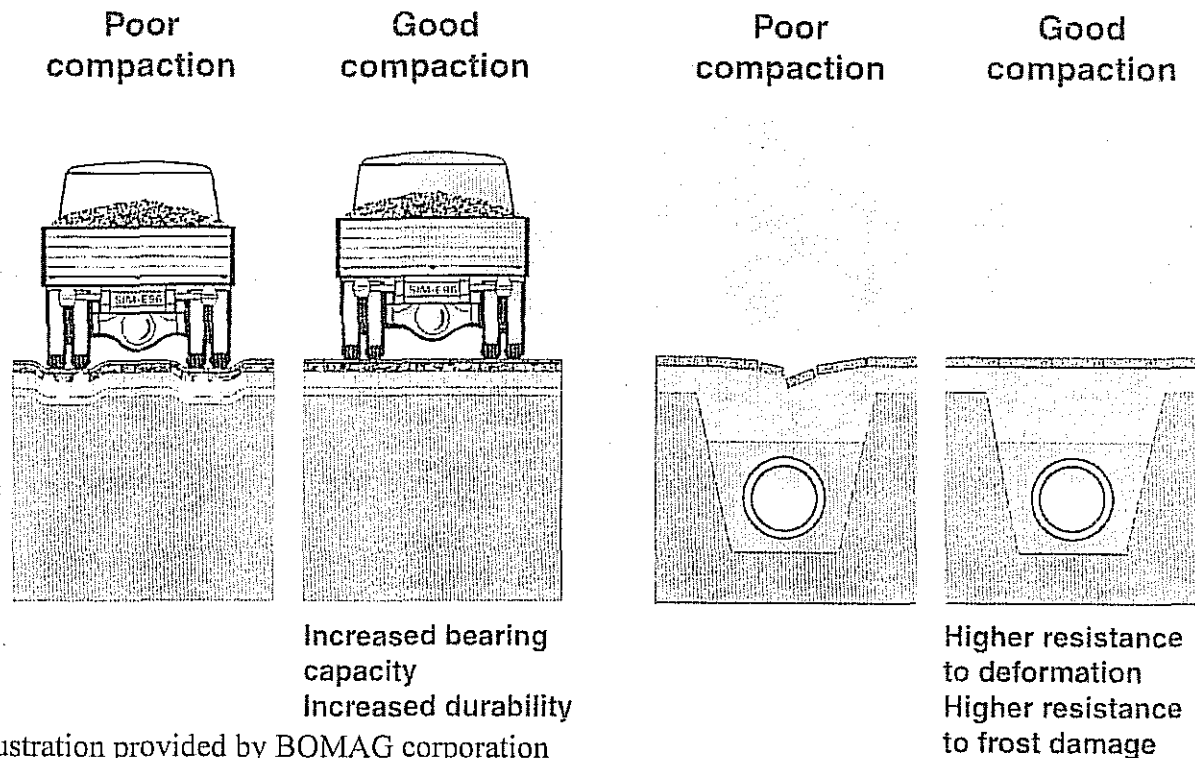
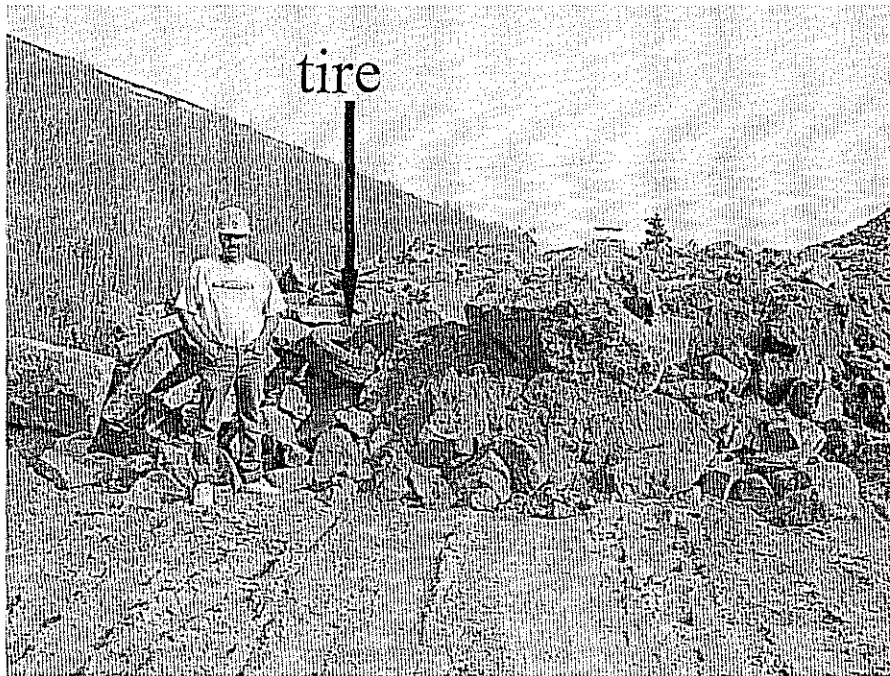


Illustration provided by BOMAG corporation

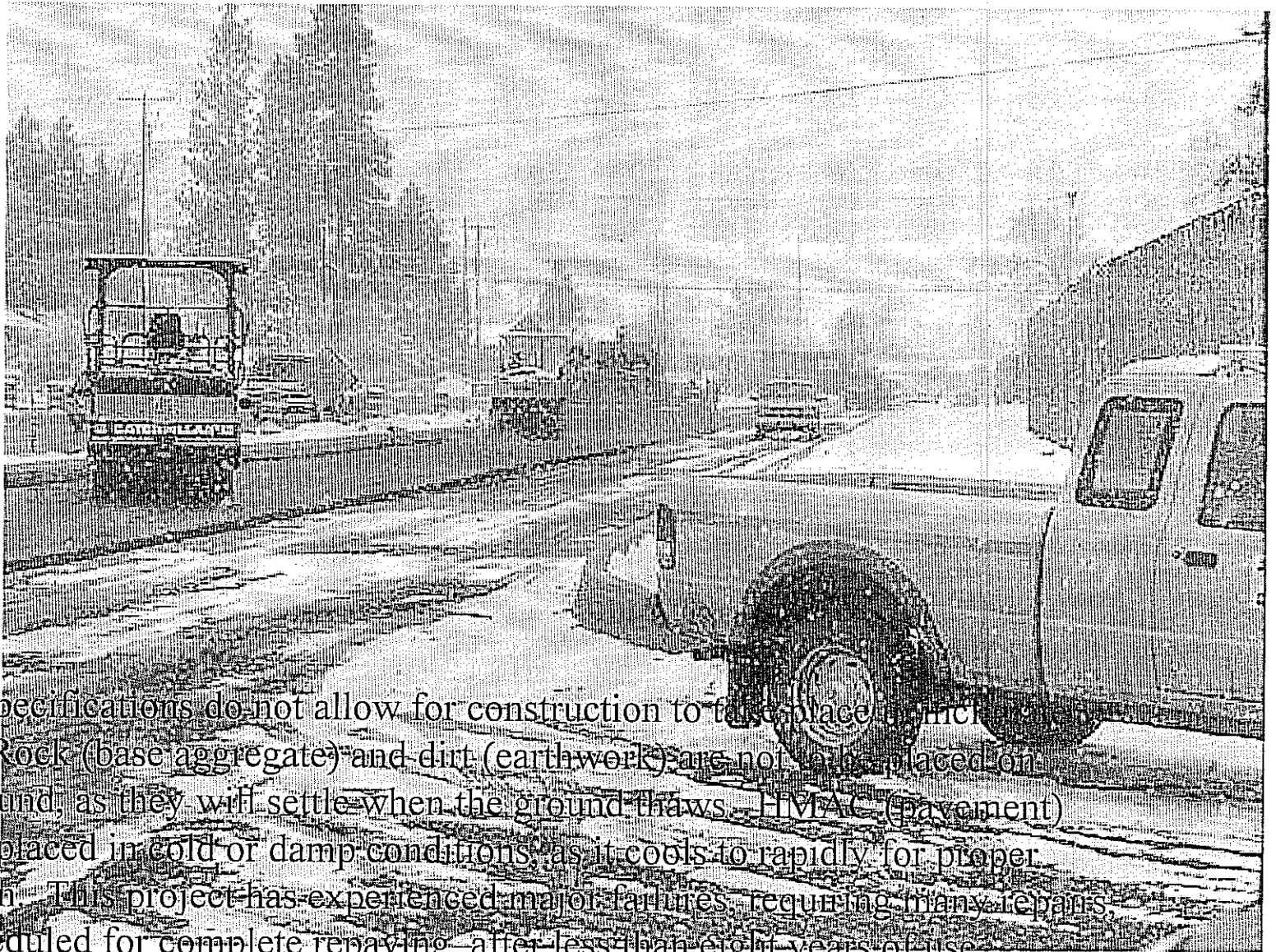
Region 4 Project Managers have allowed compromised materials and workmanship including: accepting failing compaction results, not requiring contractors to use the proper compacting equipment, accepting materials that do not meet contract specifications, not requiring contractor to use proper test methods, and using testing equipment that may be calibrated improperly or calibrated in favor of the contractor.

Use of foreign and organic material in fill

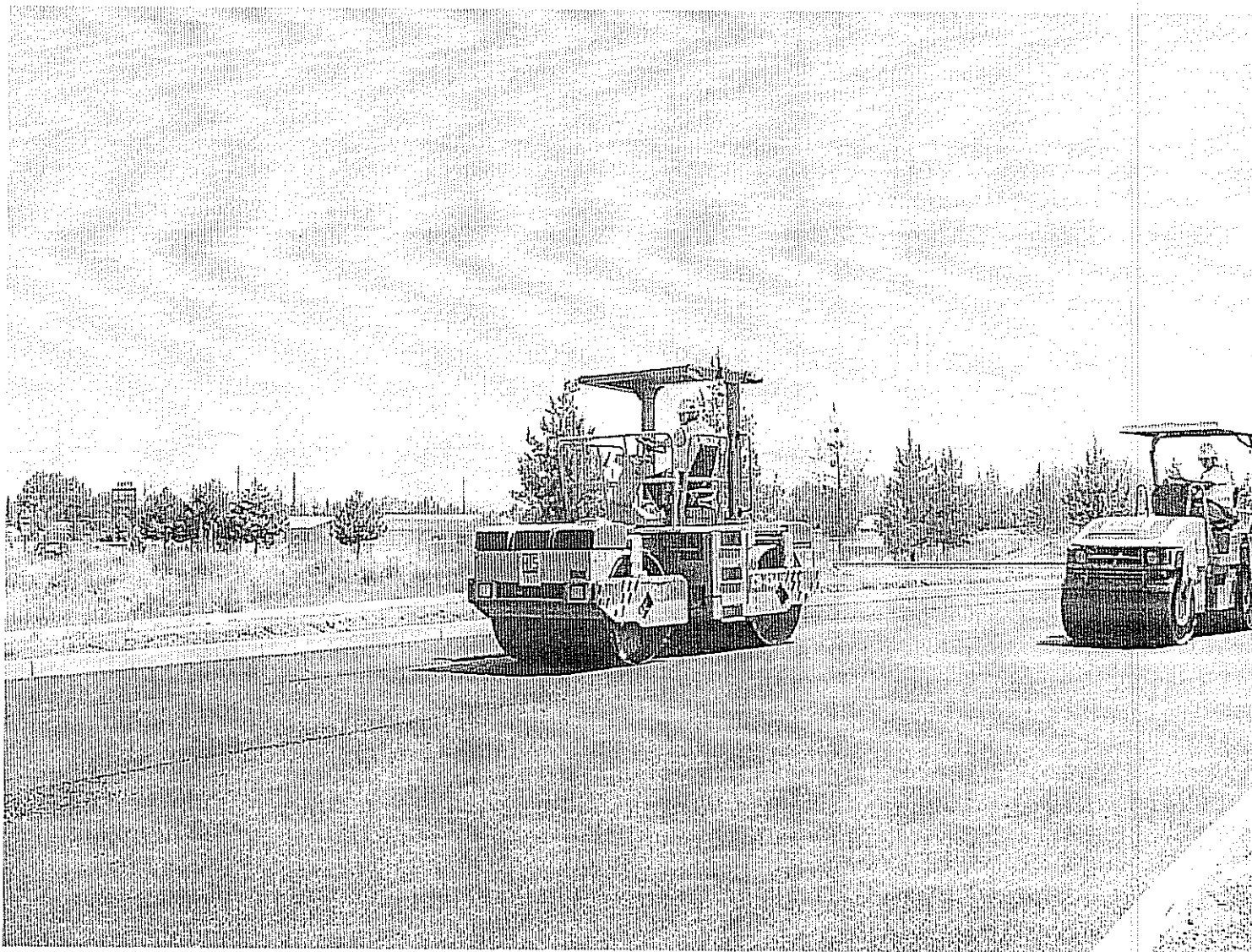


Organic and foreign materials are not allowed in the 'fill' areas, as it will decompose, leaving areas that settle and cause low spots on the roadways. Also, it is illegal to dispose of tires in unapproved areas. Tires work much the same as organic materials, except they cause the area to settle because they do not allow for compaction. They have air spaces which cannot be filled in during construction, always staying spongy.

Ignoring temperature/weather specification

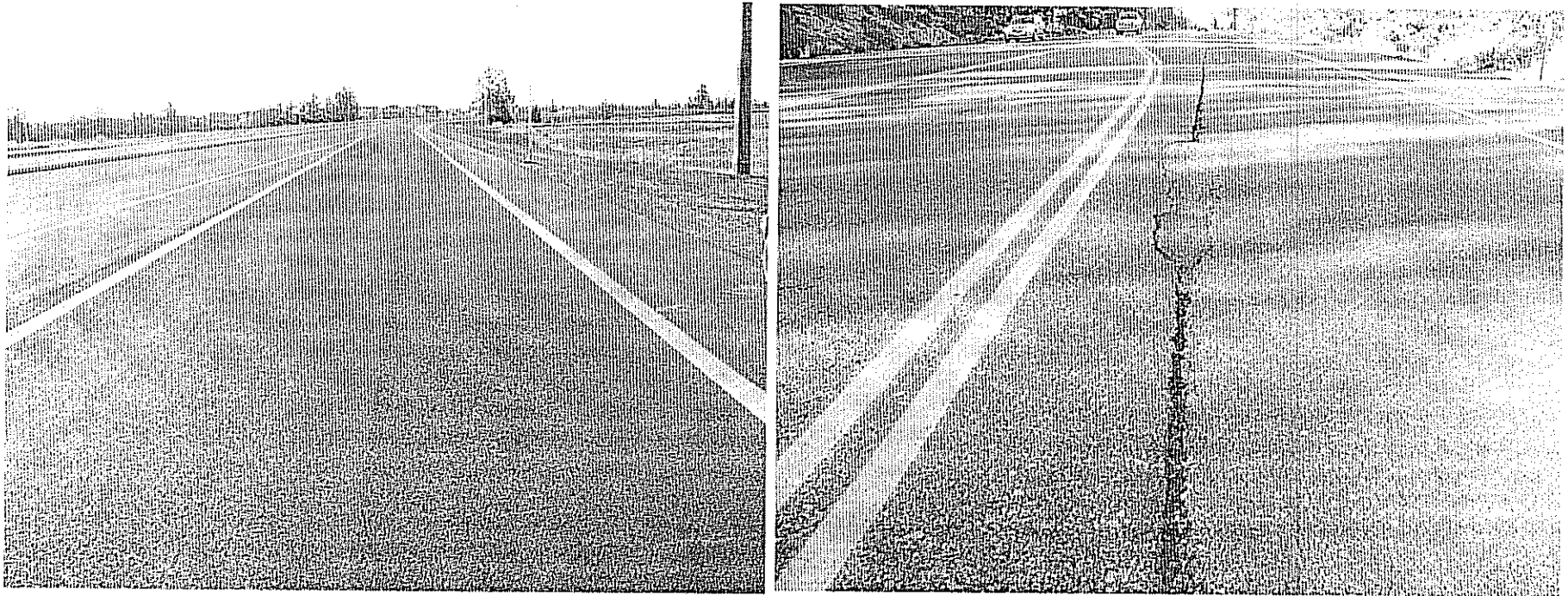


Weather specifications do not allow for construction to take place in inclement weather. Rock (base aggregate) and dirt (earthwork) are not to be placed on frozen ground, as they will settle when the ground thaws. HMA (pavement) cannot be placed in cold or damp conditions, as it cools too rapidly for proper compaction. This project has experienced major failures, requiring many repairs, and is scheduled for complete repaving, after less than eight years of use.



Equipment needs to be of the proper weight to achieve the required compaction. These rollers are too small (lightweight) for the function they are performing. The contract specifies what equipment is required.

Shoddy Workmanship



The photos denote a 'seam' in the travel lane, which is not allowed under contract specifications, as seams allow for too many future troubles. Seams are to meet in non-traveled areas (centerline, shoulders) In the photo on the right, separation is caused from not enough material being placed by the paver, thus the seams do not meet. Notice the 'patched' area; the original material has been picked out by passing traffic. The gap has allowed moisture to enter, causing erosion of the lower layers. The entire area will continue to deteriorate in this manner over time, causing potholes. The photo on the left is in brand new construction, and shows the mid-seam. This project is subject to the same issues as those outlined in photo at right.

The Project Manager's Roles and Responsibilities

The Project Manager administers the contract—they should be working in the best interest of the traveling public. They should uphold the contract, and require the contractor to deliver the materials and workmanship of the contract, ensuring ODOT is safety and budget constraints seriously. Yet time and again, they ignore the recommendations of the Quality Assurance Department, routinely allowing sub-standard materials and workmanship in our highways and bridges. Examples of this leniency include:

Changing or doctoring of numbers on test documents, doing nothing when this is brought to the attention of management;

Not requiring proper fixes when materials are found to be faulty, and pointed out in failing test results;

Writing Contract Change Orders to allow failing materials to remain in place on projects, sometimes months after the completion of the project;

Allowing testing which does not represent the areas of construction;

Not using properly calibrated equipment to performing Quality testing—both Quality Control and Quality Assurance.

Not requiring testing of materials and workmanship;

Not requiring construction or testing procedures to be followed, as per outlined in the Quality Assurance Program or contract specifications;

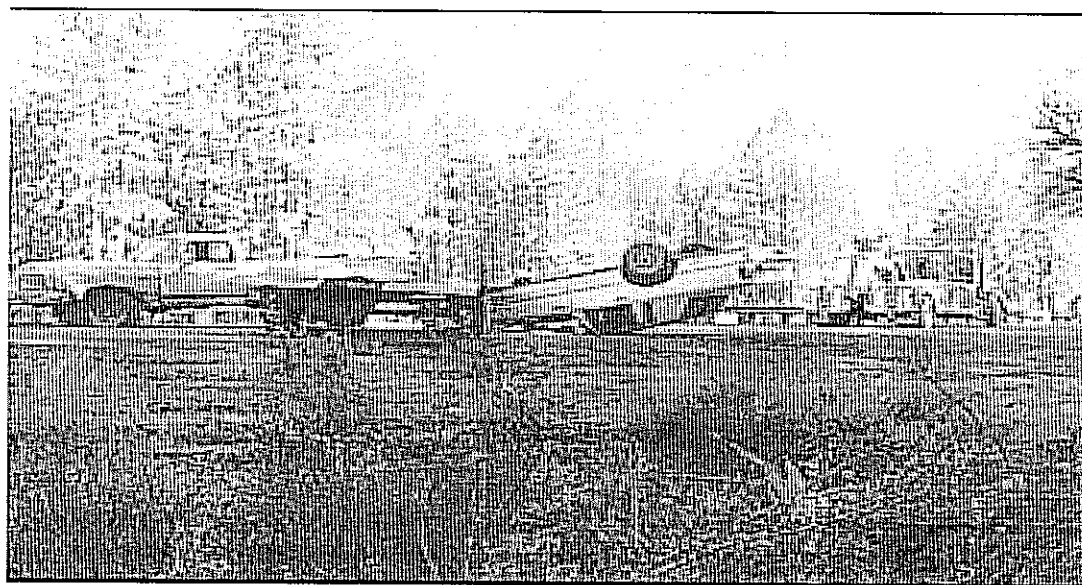
Hiding failures of materials and workmanship.

The Quality Assurance Program hinges on the three partners of the program fulfilling their functions. *When one partner overrides the other partners, the program integrity is compromised...*

PROJECT MANAGER

CONTRACTOR

QUALITY ASSURANCE



...and the traveling public pays the price.